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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/110,717	07/07/1998	RANDELL L. MILLS	9113-19-C16	5034

7590 12/20/2007  
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EXAMINER	
KALAFUT, STEPHEN J	

ART UNIT	PAPER NUMBER
1795	

MAIL DATE	DELIVERY MODE
12/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/110,717		MILLS, RANDELL L.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Stephen J. Kalafut		1795	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 and 38-167 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 38-167 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>30 Oct 2007</u>   | 6) <input type="checkbox"/> Other: _____                          |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 October 2007 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-28 and 38-167, for reasons of record previously applied to claims 1-28 and 38-166, are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. See paper no. 3, paragraph no. 2.

Claims 1-28 and 38-167, for reasons of record previously applied to claims 1-28 and 38-166, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. See paper no. 3, paragraph no. 3.

Applicant's arguments filed 30 October 2007 have been fully considered but they are not persuasive.

Regarding applicant's argument that the microwave-field Balmer line broadening in the Luque *et al.* paper being allegedly six orders of magnitude too low too account for that reported by applicant, see the Appendix to paper no. 20070716, pages 14-15.

Applicant argues that the arguments by the "Committee" concerning the difference in profile shapes in figures 4a, 4b and 4c of Cvetanovic *et al.* are without merit. Applicant states that he as computer-fit the data himself, which fits a Gaussian profile corresponding to Doppler broadening. This is not persuasive because the difference in profile shape is apparent to the naked eye, and needs no computer fitting. Also see the Appendix to paper no. 20070716, pages 9-12.

Applicant argues that in his critique of Applicant's theory, Dr. Rathke has misrepresented Applicant's equations (1) and (9) by changing mathematical signs. Regarding equation (1), in both Rathke and applicant's article, the sign between the first character, an upside-down Greek upper case delta ( $\Delta$ ), and the expression  $1/v^2 \delta^2/\delta t^2$ , in the classical wave equation, is minus. Rathke's equation (9) is derived using a "separation ansatz" in his equations (7) and (8). There does not appear to be any equation in the article by Applicant that Rathke cites, which is "The grand unified theory of classical quantum mechanics" (from *International Journal Of Hydrogen Energy*, 2002), that is the same as Rathke's equation (9), but with the sign reversed. Thus, Applicant's accusation the Dr. Rathke has committed fraud does not appear to be supported.

Applicant repeats his argument that Lieb disproves Krieg. Lieb does not reject the Heisenberg uncertainty principle entirely, but instead differs with an argument that is often based thereon. See page 555, left column, first two paragraphs. He states that "Eq. (4)" (which is on page 554), from the Heisenberg uncertainty principle, is correct, but "it is a pale reflection of the

power of the operator  $-\Delta$  to prevent collapse" (page 555, left column 4<sup>th</sup> paragraph). Lieb then offers the Sobolev inequality as a "better uncertainty principle". Nowhere, however, does Lieb ever allow for hydrogen atoms going below the conventionally known "ground state".

Applicant argues that he did not give the "Committee" reason to formulate new patentability standards. The conflict with accepted scientific standards is not a new standard of patentability, but a legitimate tool for evaluation of patentability under §101 and §112, as explained in MPEP 2107.

Attachments 115 and 116 would fall into category (4), as speculating hydrino formation as an explanation for experimental data unrelated to and not necessarily caused by hydrinos, as stated in paper no. 36.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjk

STEPHEN KALAFUT  
PRIMARY EXAMINER  
GROUP

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